

**In the Claims:**

Claims 1-15. (Cancelled).

16. (New) A method for preparing a mixture of derivatized malto-oligosaccharide species, comprising the steps of:

providing a mixture of a plurality of malto-oligosaccharide species;

catalytically hydrogenating said mixture under hydrogenation conditions suitable to substantially preserve the DP (degree of polymerization) 1-8 profile of said mixture to thereby obtain a hydrogenated malto-oligosaccharide mixture, wherein said mixture is hydrogenated to a DE (dextrose equivalent) of essentially zero, and

derivatizing said hydrogenated malto-oligosaccharide mixture by introducing a charged species, to thereby form a derivatized malto-oligosaccharide mixture.

17. (New) A method according to claim 16, said derivatizing comprising etherfying said hydrogenated malto-oligosaccharide mixture to thereby introduce a charged species.

18. (New) A method according to claim 17, said derivatizing comprising etherfying said hydrogenated malto-oligosaccharide mixture to introduce a cationic charge.

19. (New) A method according to claim 17, wherein said hydrogenated  $\alpha$ -alto-oligosaccharide mixture comprises a maltodextrin.
20. (New) A method according to claim 19, wherein at least 40% of the  $\alpha$ -alto-oligosaccharide species in the mixture have a DP greater than 10.
21. (New) A method according to claim 17, wherein the derivatized malto-oligosaccharide mixture has a degree of substitution of 0.25 or more.
22. (New) A method according to claim 18, whereby said cationic charge is introduced by derivatizing with an amino compound.
23. (New) A method according to claim 22, wherein said amino compound is a tertiary or quaternary amine.
24. (New) A method according to claim 23, said hydrogenated malto-oligosaccharide mixture being derivatized with 3-chloro-2-hydroxypropyl-trimethyl ammonium chloride.
25. (New) A method according to claim 24, wherein said hydrogenated  $\alpha$ -alto-oligosaccharide mixture comprises a maltodextrin.
26. (New) A method according to claim 25, wherein at least 40% of the  $\alpha$ -alto-oligosaccharide species in the mixture have a DP greater than 10.

27. (New) The derivatized, charged malto-oligosaccharide mixture produced by the method of claim 24.

28. (New) A mixture of derivatized malto-oligosaccharide species prepared by a method comprising the steps of:

providing a mixture of a plurality of malto-oligosaccharide species;

catalytically hydrogenating said mixture under hydrogenation conditions suitable to substantially preserve the DP 1-8 profile of said mixture to thereby obtain a hydrogenated malto-oligosaccharide mixture, wherein at least 40% of the malto-oligosaccharide species in the mixture have a DP greater than 10, and said mixture is hydrogenated to a DE of essentially zero; and

derivatizing said hydrogenated malto-oligosaccharide mixture by introducing a charged species, to thereby form a derivatized malto-oligosaccharide mixture.

29. (New) A mixture according to claim 28, said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to thereby introduce a charged species.

30. (New) A mixture according to claim 29, said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to introduce a cationic charge.

31. (New) A mixture according to claim 29, wherein said hydrogenated maltoligosaccharide mixture comprises a maltodextrin.
32. (New) A mixture according to claim 31, wherein at least 40% of the maltoligosaccharide species in the mixture have a DP greater than 10.
33. (New) A mixture according to claim 29, wherein the derivatized maltoligosaccharide mixture has a degree of substitution of 0.25 or more.
34. (New) A mixture according to claim 30, whereby said cationic charge is introduced by derivatizing with an amino compound.
35. (New) A mixture according to claim 34, wherein said amino compound is a tertiary or quaternary amine.
36. (New) A mixture according to claim 35, said hydrogenated maltoligosaccharide mixture being derivatized with 3-chloro-2-hydroxypropyl-trimethyl ammonium chloride.
37. (New) A method according to claim 36, wherein said hydrogenated maltoligosaccharide mixture comprises a maltodextrin.
38. (New) A method according to claim 37, wherein at least 40% of the maltoligosaccharide species in the mixture have a DP greater than 10.

39. (New) A method for preparing a mixture of derivatized malto-oligosaccharides comprising:

providing a mixture of malto-oligosaccharides, such mixture having been prepared by catalytically hydrogenating a mixture of malto-oligosaccharides under conditions suitable to substantially preserve the DP1-8 profile of said mixture; and derivatizing said hydrogenated malto-oligosaccharide mixture by introducing a charged species, to thereby form a derivatized charged malto-oligosaccharide mixture.

40. (New) A method according to claim 39 said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to thereby introduce a charged species.

41. (New) A method according to claim 40, said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to introduce a cationic charge.

42. (New) A method according to claim 40, wherein said hydrogenated malto-oligosaccharide mixture comprises a maltodextrin.

43. (New) A method according to claim 42, wherein at least 40% of the malto-oligosaccharide species in the mixture have a DP greater than 10.

44. (New) A method according to claim 40, wherein the derivatized malto-oligosaccharide mixture has a degree of substitution of 0.25 or more.

45. (New) A method according to claim 41, whereby said cationic charge is introduced by derivatizing with an amino compound.
46. (New) A method according to claim 45, wherein said amino compound is a tertiary or quaternary amine.
47. (New) A method according to claim 46, said hydrogenated malto-oligosaccharide mixture being derivatized with 3-chloro-2-hydroxypropyl-trimethyl ammonium chloride.
48. (New) A method according to claim 47, wherein said hydrogenated malto-oligosaccharide mixture comprises a maltodextrin.
49. (New) A method according to claim 48, wherein at least 40% of the malto-oligosaccharide species in the mixture have a DP greater than 10.
50. (New) The derivatized, charged malto-oligosaccharide mixture produced by the method of claim 47.
51. (New) A mixture of derivatized charged malto-oligosaccharides prepared by a method comprising the steps of:
- providing a mixture of malto-oligosaccharides, such mixture having been prepared by catalytically hydrogenating a mixture of malto-oligosaccharides under conditions suitable to substantially preserve the DP 1-8 profile of said mixture; and derivatizing said hydrogenated

malto-oligosaccharide mixture by introducing a charged species, to thereby form a derivatized charged malto-oligosaccharide mixture.

52. (New) A mixture according to claim 51, said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to thereby introduce a charged species.

53. (New) A mixture according to claim 52, said derivatizing comprising etherifying said hydrogenated malto-oligosaccharide mixture to introduce a cationic charge.

54. (New) A mixture according to claim 52, wherein said hydrogenated malto-oligosaccharide mixture comprises a maltodextrin.

55. (New) A mixture according to claim 54, wherein at least 40% of the malto-oligosaccharide species in the mixture have a DP greater than 10.

56. (New) A mixture according to claim 52, wherein the derivatized malto-oligosaccharide mixture has a degree of substitution of 0.25 or more.

57. (New) A mixture according to claim 53, whereby said cationic charge is introduced by derivatizing with an amino compound.

58. (New) A mixture according to claim 57, wherein said amino compound is a tertiary or quaternary amine.

59. (New) A mixture according to claim 58, said hydrogenated malto-oligosaccharide mixture being derivatized with 3-chloro-2-hydroxypropyl-trimethyl ammonium chloride.

60. (New) A method according to claim 59, wherein said hydrogenated malto-oligosaccharide mixture comprises a maltodextrin.

61. (New) A method according to claim 60, wherein at least 40% of the malto-oligosaccharide species in the mixture have a DP greater than 10.